

altruistic, cooperative, loving, moral self or ‘soul’, and the ‘voice’ or expression of which is our conscience? What is the biological origin of our species’ extraordinary ‘**shrink from stealing or lying**’, ‘**got to save those kids**’, selflessly prepared ‘**to march into hell for a heavenly cause**’ moral sense?

Chapter 5:4 Love-Indoctrination

³⁸⁸ Ever since Charles Darwin published his natural selection explanation for the origins of the great variety of life on Earth in 1859 all manner of theories have been put forward to suggest how one species, namely *our* species, managed to defy the essential selfish nature of the natural selection process and develop unconditionally selfless moral instincts. Indeed, in response to the great build up of anxiety in the world about the now desperate plight of the human race and the resulting urgent need for the relieving answers that are being presented in this book—especially answers to the questions of the origin of our species’ moral nature and present human-condition-afflicted lack of compliance with it—almost every edition of every science journal over the last 10 years has either presented or discussed a new theory that attempts to account for our moral sense. But of all these theories (a brief history of which will be presented in chapter 6) only one provides the fully accountable and thus adequate, true explanation for the origins of our moral sense, which is that it was achieved through nurturing—a mother’s maternal instinct to care for her offspring. However, as will be acknowledged shortly (in ch. 5:7), and described in detail in chapter 6, the problem with this nurturing explanation, and why its early permutations were discarded by the scientific establishment, is that it has been an unbearably confronting truth. It is *only* now that we can explain the human condition and thus understand *why* the present human-condition-afflicted human race hasn’t been able to adequately nurture our infants to the extent their instincts expect that it becomes safe to finally admit that nurturing is what made us human—that it was nurturing that gave us our moral soul and created humanity. So how *did* nurturing create our extraordinary unconditionally selfless moral instincts?

³⁸⁹ Genetic traits for nurturing are intrinsically selfish (which, as has been emphasised, genetic traits normally have to be if they are to survive) because through a mother’s nurturing and fostering of offspring who carry her genes her genetic traits for nurturing are selfishly ensuring their reproduction into the next generation. However, while nurturing *is* a genetically selfish trait, from an observer’s point of view it *appears* to be unconditionally selfless behaviour—the mother is giving her offspring food, warmth, shelter, support and protection for *apparently* nothing in return. This point is most significant because it means from the infant’s perspective its mother is treating it with real love, with unconditional selflessness. The infant’s brain is, therefore, being trained or indoctrinated or inscribed with unconditional selflessness and so, with enough training in unconditional selflessness, that infant will grow into an adult who behaves unconditionally selflessly. Apply this training across all the members of that infant’s group and the result is an unconditionally selflessly behaved, cooperative, fully integrated society.

³⁹⁰ The ‘trick’ in this ‘love-indoctrination’ process lies in the fact that the traits for nurturing are encouraged, or selected for genetically, because the better the infants are cared for, the greater are their, and the nurturing traits’, chances of survival. The process

does, however, have an integrative side effect, in that the more infants are nurtured, the more their brains are trained in unconditional selflessness. There are very few situations in biology where animals appear to behave selflessly towards other animals—normally, they each selfishly compete for food, shelter, territory and mating opportunities. Maternalism, a mother's fostering of her infant, is one of the few situations where an animal appears to be behaving selflessly towards another animal and it was this *appearance* of selflessness that exists in the maternal situation that provided the integrative opportunity for the development of love-indoctrination, the training of individuals in unconditional selflessness. And with this unconditionally selfless behaviour recurring over many, many generations, the unconditionally selfless behaviour will become instinctive—a moral soul will be established—because genetic selection will inevitably follow and reinforce any development process occurring in a species. The difficulty was in getting the development of unconditional selflessness to occur in the first place, for once it was regularly occurring it would naturally become instinctive over time.

³⁹¹ But for a species to develop nurturing—to develop this 'trick' for overcoming the gene-based learning system's seeming inability to develop unconditional selflessness—it required the capacity to allow its offspring to remain in the infancy stage long enough to allow for the infant's brain to become trained or indoctrinated with unconditional selflessness or love. In most species, infancy has to be kept as brief as possible because of the infant's extreme vulnerability to predators. Zebra foals, for example, have to be capable of independent flight almost as soon as they are born, which gives them little opportunity to be trained in selflessness. But as the following photo of a rhesus monkey trying to carry its infant illustrates, being semi-upright as a result of their tree-living, swinging-from-branch-to-branch, arboreal heritage meant primates' arms were largely freed from walking and thus available to hold dependents. Infants similarly had the capacity to latch onto their mothers' bodies. This freedom of the upper body meant primates were especially facilitated for prolonging their offspring's infancy and thus developing love-indoctrination.



Photograph by Wolfgang Suschitzky

Rhesus monkey with infant. This picture illustrates the difficulty of carrying an infant and suggests the reason for bipedalism.

³⁹² It follows that the longer infancy is delayed, the more and longer infants had to be held, and thus the greater need and, therefore, selection for the arms-freed, upright walking ability known as bipedalism. When I first put forward this nurturing, ‘love-indoctrination’ explanation for humans’ unconditionally selfless moral nature in a 1983 submission to *Nature* and *New Scientist* (see <www.humancondition.com/nature>), I said, contrary to prevailing views, that it meant bipedalism must have developed early in this nurturing of love process, and, in fact, as will be discussed in more detail shortly, the early appearance of bipedalism in the fossil record of our ancestors is now being found. For instance, in 2012 it was reported that ‘**The oldest hominins currently known are *Sahelanthropus tchadensis*...dated to between 6 and 7 mya [million years ago]**’, which the fossil record suggests ‘**stood and walked bipedally**’ (Herman Pontzer, ‘Overview of Hominin Evolution’, *Nature Education Knowledge*, 2012, Vol.3, No.10).

³⁹³ But while bipedalism was the key factor in developing nurturing and thus love-indoctrination, other influences also played a pivotal role, most notably the presence of ideal nursery conditions. This entailed uninterrupted access to food, shelter and territory, for if any element was compromised, or other difficulties and threats from predators excessive, then we can assume there would have been a strong inclination to revert to more selfish and competitive behaviour. The successful nurturing of infants therefore required ample food, comfortable conditions and security from external threats over an extended period. But, in addition to these practical factors, to ensure the success of the love-indoctrination process, it wasn’t enough to simply *look after* the infants, they had to be *loved*, and so maternalism became about much more than mothers simply protecting, providing for, and training their infants in life skills—it became about demonstrably loving them. Significantly, we speak of ‘motherly love’, not ‘motherly protection, provision and training’.

³⁹⁴ So, in addition to the prerequisites of, firstly, a physiology that facilitated an extended infancy and, secondly, ideal nursery conditions, what was *also* required for love-indoctrination to occur was the presence and influence of more maternal mothers. Of course, the difficulty with selecting for more maternal mothers is that their genes don’t tend to endure because their offspring tend to be the most selflessly behaved, too ready to put others before themselves, leaving the more aggressive, competitive and selfish individuals to take advantage of their selflessness. Such selfish opportunism *could*, however, be avoided if *all* members of the group were equally well nurtured with love, equally trained in selflessness—this situation being yet another of the delicate conditions that has to be maintained if love-indoctrination is to develop, for any breakdown in nurturing within a group that is in the midst of developing love-indoctrination could jeopardise the whole situation and see it revert to the old state of the ‘each-for-his-own’, opportunistic, all-out-competition-where-only-dominance-hierarchy-can-bring-some-peace, selfish-genes-rule, ‘animal condition’.

³⁹⁵ It can be seen then that while the development of unconditional selflessness through the love-indoctrination process of a mother’s nurturing care of her infant *was* possible, it was not easy, even for the exceptionally facilitated primates, which explains why none of the primate species apart from our ape ancestors have been able to complete the development of love-indoctrination to the point of becoming fully integrated. While, as will shortly be described in chapter 5:6, bonobos are on the threshold of this achievement, the evidence so far indicates that it has only been our ape ancestors who managed to *complete* the process, the result of which

is our species' unconditionally selfless, genuinely altruistic, universally loving instinctive self or 'soul', the 'voice' or expression of which is our moral 'conscience'. Before concluding this section, it is important to note that this love-indoctrination process involved an *indoctrination* or training in unconditional selflessness, not an *understanding* of it. The search for knowledge still had to take place, which is why the human-condition-producing clash between our instincts and conscious intellect occurred. (The process by which love-indoctrination liberated consciousness will be introduced in ch. 5:8, and fully explained in ch. 7).

Chapter 5:5 Fossil evidence confirming the love-indoctrination process

³⁹⁶ Although the fossil record has been slow to yield evidence of our ape ancestors who lived during humanity's infancy (which, as will be explained in chapters 8:2 and 8:3, lasted from some 12 to 4 million years ago), the very recent discoveries of fossils belonging to our direct ancestors from this period are now confirming the love-indoctrination process. These recently unearthed ancestors are: *Sahelanthropus tchadensis* (who lived some 7 million years ago and is thought to be the first representative of the human line after we diverged from humans' and chimpanzees' last common ancestor); *Orrorin tugenensis* (who lived some 6 million years ago); and the two varieties of *Ardipithecus*: *kadabba* (who lived some 5.6 million years ago), and *ramidus* (who lived some 4.4 million years ago). Incidentally, *Sahelanthropus* means 'Sahel man' (Sahel is an area near the Sahara); *Orrorin tugenensis* means 'original man whose fossils were found in the Tugen region in Kenya'; while *Ardipithecus* means 'ground ape', with *kadabba* meaning 'oldest ancestor', and *ramidus* meaning 'root' or basal family ancestor.

³⁹⁷ It is worth emphasising that these fossils have all been found *very* recently. *Sahelanthropus* was only discovered in 2002 (in the form of a skull) and decisively identified as a human ancestor in April 2013, while fragments of a skull, jaw and thigh bone belonging to *Orrorin* were first unearthed in 2001. Although fragments of *Ardipithecus* were first discovered by a team led by the anthropologist Tim White in 1992, and their excavation of a largely intact skeleton (which was nicknamed 'Ardi') began in 1994, the remains of the skeleton—1 of only 6 reasonably complete skeletons of early humans older than 1 million years—were in such poor condition that it took until 2009 (over 15 years of analysis) for reports to be published. With studies on all of these recently discovered ancestors now becoming available, including the series of 2009 *Ardipithecus* reports, which the journal *Science* deemed 'Breakthrough of the Year', it is exciting to see that confirming evidence of the love-indoctrination process that led to the establishment of our extraordinary unconditionally selfless moral instincts is slowly but surely emerging.

³⁹⁸ So, how does this new evidence confirm the love-indoctrination process? How, for instance, does it affect our understanding of the emergence of bipedalism, the first key factor in developing unconditionally selfless moral instincts?

³⁹⁹ As I just mentioned, when I first put forward the nurturing, 'love-indoctrination' explanation for such instincts in 1983, I said, contrary to prevailing views, that it meant bipedalism must have developed early in this nurturing of love process and, it follows, early in our ancestors' history, and, indeed, that is what these fossil discoveries now show.